

Additional Faunistic Data and Discussions of Lecithoceridae (Lepidoptera) from Sri Lanka, with Descriptions of Seven New Species

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Abstract Two new species of Torodorinae-*Hyperochtha acanthovalva* sp. nov., and *Antiochtha pycnotarsa* sp. nov.-and five new species of Lecithocerinae-*Alciphanes clavata* sp. nov., *Frisilia ceylonica* sp. nov., *Carodista grypotatos* sp. nov., *C. tribrachia* sp. nov., and *C. wilpattuae* sp. nov.-are described, with illustrations of their genitalia. Some generic relationships are discussed, *Technographa* Meyrick, syn. nov. with *Timyra* Walker and *Stelechoris* Meyrick, stat. rev. is proposed. Two species previously placed in *Thubana* Meyrick are transferred to the genus *Stelechoris* Meyrick, and ten species of *Lecithocera* are transferred to *Carodista* Meyrick.

Key words Lepidoptera, Lecithoceridae, description, faunistic data, Sri Lanka

INTRODUCTION

Since Walker (1864, 1886), Walsingham (1887), Felder (1875), and Meyrick (1887-1929) described more than 130 species of Lecithoceridae from Sri Lanka, no comprehensive study has been made for the fauna, until Wu and Park (1998-1999) reviewed 171 species including descriptions of 35 new species in the six separate articles: "Taxonomic review of Lecithoceridae in Sri Lanka I-VI". Recently, March -June 2001, the first author reexamined the collection of the Lecithoceridae in the Smithsonian Institution and described eight new species. Some additional faunistic data, discussion on the generic relationships, synonymization of *Technographa* Meyrick with *Timyra* Walker, change of a generic status of *Stelechoris* Meyrick, and transfers of thier genera for 16 species are provided.

DESCRIPTIONS

Subfamily TORODORINAE

Genus *Hyperochtha* Meyrick, 1925

The genus is characterized by veins M_2 and M_3 coincident in the both wings. *Hyperochtha* Meyrick is closest to *Philharmonia* Gozmany and *Eccedoxa* Gozmany, however, it can be separated from *Philharmonia* by M_{2+3} arising from near the middle of the cell, and from *Eccedoxa* by having R_5 present in the forewing.

Hyperochtha acanthovalva Park, sp. nov.

(Figs 1, 9, 16)

Diagnosis. The new species is superficially similar to *H. hoplophora* Gozmany, but the antemedian dark patch is broader, somewhat quadrate, and does not reach the costa. The male genitalia also are similar to those of *H. hoplophora*, but can be easily separated by the shape of the aedeagus: slender, nearly straight, and with a prominent preapical thorn.

Male genitalia (Fig. 9). Uncus fairly long, slender. Gnathos relatively small. Valva broadened basally, narrowed distally, with numerous setae along ventral margin in distal half; apex acute, with a small apical thorn. Juxta somewhat quadrate. Aedeagus slender, straight, with well sclerotized preapical thorn; apex round, somewhat forming spatulate plate.

Female genitalia (Fig. 16). Eighth sternite deeply emarginate on distal margin, with short lateral lobes. Antevaginalis triangular, densely setose. Antrum broad, jar-shaped, membranous, connecting to narrow ductus bursae. Corpus bursae pear-shaped; signum absent.

Description. Male and female. Wingspan 9.5–10.0 mm. Head with appressed brown scales, greyish orange hair-like scales laterally. Tegula and thorax brown. Scape of antenna orange white, dark brown on dorsodistal surface. Second segment of labial palpus thickened with appressed scales, dark brown in basal 2/3 and pale orange in apical 1/3; third segment slightly shorter than 2nd, pale greyish orange, dark brown ventrally. Forewing elongate; ground colour brown; median fascia dark brown, subquadrate, broadly developed near basal 1/3, from below R vein and extended to inner margin; dark brown spot at end of cell; postmedian line weak, slightly serrate; apex obtuse; termen oblique. Venation with R_3 and R_{4+5} stalked; R_5 to costa; CuA_1 absent; CuA_2 arising from near angle. Hindwing relatively broad, pale grey; M_3 and CuA_1 with long-stalked. Hindtibia long, clothed with relatively short setae. Abdomen greyish dorsally; abdominal tergite with well visible setae.

Type. Holotype: male, Kan. Dist., Peradeniya 2300 ft, Upper Hantahe Hill, 12–16 Jan. 1970 (Davis & Rowe). Paratypes: 1 ♂, Kan. Dist., Kandy 2100 ft. Udawattakele Sanc., 10–23 Jan 1970 (Davis & Rowe); 1 ♂, Kan. Dist., Kandy 1800 ft, Park View Motel, 7–14 Jan. 1970 (Davis & Rowe), gen. preparation no., USNM-88970 (♂), -88845 (♀); 1 ♀, 1 ♂, Kan. Dist., Kandy 1800 ft. Udawattakele, black light, 19 Nov. 1976 (GF Hevel *et al.*), USNM-92159 (♂); 1 ♂, Gal. Dist., Kannelia 200 ft, black

light, 15–17 Nov. 1976 (GF Hevel *et al.*), USNM–92160; 1 ♂, Mata. Dist., Deniyaya near 1000 ft, malaise trap, 19–20 Oct. 1976 (GF Hevel *et al.*), USNM–88844. All types are in the National Museum of Natural History (USNM), USA.

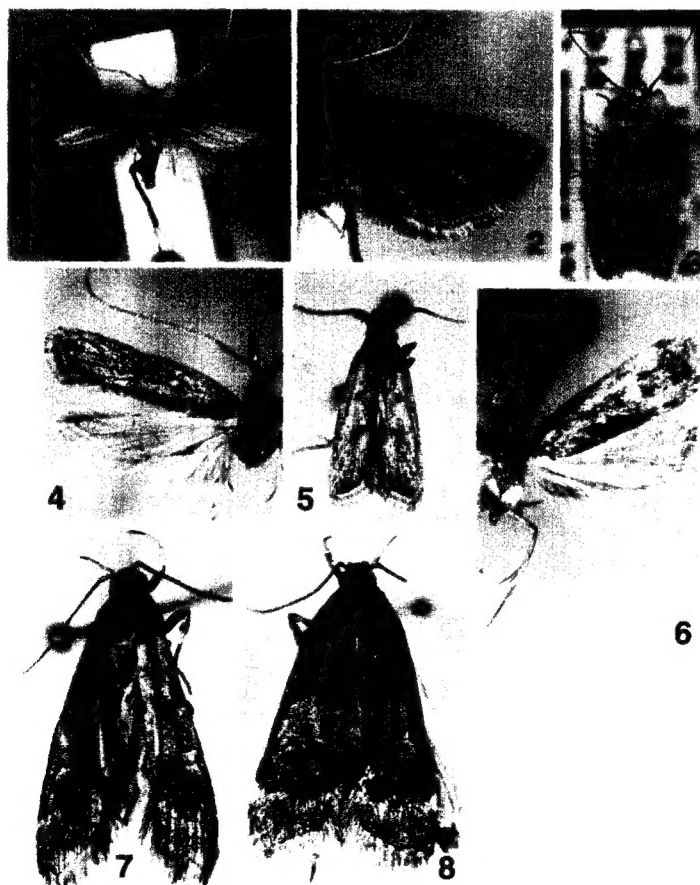
Etymology. The specific name is derived from “acanth” (= spine), referring to spines in the valva of the male genitalia.

Genus *Antiochtha* Meyrick, 1905

Antiochtha pycnotarsa Park, sp. nov.

(Figs 2, 10)

Diagnosis. This new species is hardly distinguishable from its allies, but it can be separated by golden yellow transverse lines along veins on the dorsal surface, and blackish scales of the fringe.



Figs 1–8. Adults: 1, *Hyperochtha acanthovalva* sp. nov.; 2, *Antiochtha pycnotarsa* sp. nov.; 3, *Alciphanes clavata* sp. nov.; 4, *Frisilia trizeugma* Wu & Park; 5, *F. ceylonica* sp. nov.; 6, *Carodista wilpattuue* sp. nov.; 7, *C. grypotatos* sp. nov.; 8, *C. tribrachia* sp. nov..

Male genitalia (Fig. 10). Uncus relatively long, bent downwardly. Gnathos small. Valva extremely broad at base, attenuated to apex; costa strongly incurved beyond middle; apex round; sacculus extended to 2/5 along ventral margin. Juxta fan-shaped, with heavily sclerotized median vertical flaps. Aedeagus stout, bent at basal 1/3; apex round, bent into hook-shaped; a single large cornutus with a large conical process and several smaller ones.

Description. Wingspan, 16.0 mm. Head pale greyish orange with brownish scales medially. Tegula with dark brown scales. Antenna pale orange or pale greyish orange throughout; flagella densely ciliated ventrally. Labial palpus moderate; 2nd segment thickened with appressed scales, dark brown on outer surface, yellowish white ventroapically; 3rd segment strongly recurved, pale greyish orange, blackish preapically. Forewing dark brown, with golden yellow scales along veins; costa golden yellow; apex acute; termen excavated postrad of apex; fringe black with creamy white basal line around apex and on termen; R_3 stalked with R_{4+5} near middle; R_5 to beyond apex; M_1 connate to R_3 ; CuA_1 and CuA_2 stalked near base. Hindwing with M_2 remote from M_3 ; M_3 and CuA_1 coincident. Hindtibia characteristically thickened with somewhat broad scales; 1st tarsus thickened as wide as tibia. Midtibia also thickened with similar scales. Abdominal tergites with dense spines.

Type. Holotype: male, Kagella Dist., Kitulgala, 14–16 Dec. 1978 (R. Johansson), deposited in the Zoological Museum, Copenhagen, Denmark.

Etymology. The specific name is derived from “pycno” (= thick), referring to the thickened tarsus.

Subfamily LECITHOCERINAE

Genus *Alciphanes* Meyrick, 1925

= *Heteralcis* Meyrick, 1925

The genus is much related to the *Timyra* Walker. The forewing is elongate, more or less lanceolate, with attenuate termen; R_5 extends to costa, M_2 and M_3 stalked in the forewing are separable characters from its allies. It has a long hair-pencil or a row of short setae from base to middle below the cell.

Alciphanes clavata Park, sp. nov.

(Figs 3, 11, 17)

Diagnosis. This new species is hardly distinguishable from *T. isochra* Meyrick in superficial appearance, however, it can be differentiated by characters of the male genitalia: costal process more slender, curved outwardly, arising near middle of costa; distal part of valva more elongate with round distro-ventral margin, more or less clavated (somewhat quadrate in *isochra* Meyrick), and narrower than in *isochra*; aedeagus more slender, as long as saccus+tegumen, cornuti consist of two bundles of needles, instead of three in *isochra*, which are less stout, shorter than saccus+tegumen.

Male genitalia (Fig. 11). Basal lobes of uncus relatively long, extending distally. Gnathos moderate. Valva with slender costal process, arising from near middle, slightly curved outward, with pointed apex; costa beyond process gently incurved into oval; distal part of valva elongate, somewhat clavate, with round distro-ventral margin bearing long setae; ventral margin slightly expanded at basal 1/4 and deeply

emarginate before distal part; a mass of strong setae in central portion; sacculus narrow, extending to emargination. Juxta deeply emarginate on distal margin, with median process anteriorly. Aedeagus as long as valva, with two bundles of needle-like cornuti, larger one nearly twice in size.

Female genitalia (Fig. 17). Eighth segment slightly sclerotized, triangularly incurved on anterior margins of sternite and tergite. Ductus bursae narrow, membranous in distal 1/2, broadened beyond middle, sac-shaped, narrowed near junction with corpus bursae; ductus seminalis arising from this sac-shaped region, broadly connected with it. Corpus bursae pear-shaped, membranous; signum forms a broadly sclerotized plate, with heavily sclerotized transverse costal margin.

Description. Male and female. Wingspan 12.5–13.5 mm. Head orange white. Tegula and thorax greyish brown at basal 1/3, orange white, partially speckled with brown scales beyond 2/3. Scape of antenna in male elongate, with scale-tuft at apex; female without apical scale tuft. Second segment of labial palpus in male somewhat spatulate, clothed in long, orange white scales on outer surface, concaved internally with dark brown scales; third segment short, shorter than scales of 2nd, appressed downwardly. Labial palpus in female moderately long, recurved, thickened, with appressed scales; 3rd segment slender, as long as 2nd. Forewing elongate, narrowed towards apex; four well-developed brown fascia (subbasal, antemedian, median, and postmedian) broadly presented, median and postmedian fascia connected medially. Venation with R_3 stalked with R_{4+5} ; R_5 to costa; M_1 remote at base; M_2 and M_3 stalked; CuA_1 stalked with M_2+M_3 . Hindwing trapezoidal; apex round; termen almost straight, rather round, orange white, with well-developed densely short hairs and a bundle of long hair-pencil near tornus. Hindtibia clothed with long, rough hair-like scales above and some broad, short metallic leaden scales near base and apex.

Type. Holotype: male, Jap. Dist., Chundikkulan Sanct. 25 ft, 7 Nov. 1976 (GF Hevel *et al.*). Paratypes: 18 ♂, 2 ♀, same data as the holotype; 8 ♂, Kan. Dist., Peradeniya 2300 ft, Upper Hantane Hill, 12–16 Jan. 1970 (Davis & Rowe); 2 ♂, Kan. Dist., Kandy 2100 ft, Udawattakele Sanc., 10–23 Jan. 1970 (Davis & Rowe); 1 ♂, Kan. Dist., Udawattakele 1800 ft, 19 Nov. 1976 (GF Hevel *et al.*); 4 ♂, 1 ♀, Rat. Dist., Uggalkaltota 350 ft, Irrigation Bangalow, 31 Jan.–8 Feb. 1970 (Davis & Rowe), gen. prep. no. USNM-10531 (♂), 88956 (♂), 88957 (♀); 1 ♂, Ann. Dist., Irrigation Bangalow, Padaviya 180 ft, 27 Feb.–9 Mar. 1970 (Davis & Rowe); 1 ♂, Ann. Dist., Hunuwilagawa, near Wilpattu 200 ft, 28 Oct.–3 Nov. 1976 (GF Hevel *et al.*). All types are in the National Museum of Natural History, USA.

Etymology. The specific name refers to the shape of the distal part of valva in the male genitalia.

Genus *Frisilia* Meyrick, 1864

The genus is characterized by the characteristic shape of the labial palpus in the male, with the 3rd segment somewhat mustache-shaped and curved downward. In the female the 2nd segment normally slender, with long, loose scales ventrally, and the 3rd segment is unmodified.

Frisilia trizeugma Wu et Park

(Fig. 4)

Korean J. Syst. zool. 15(1): 1–9.

Most of paratypes previously designated for this species were identified incorrectly; only one paratype (1

♂, Sri Lanka, Rat. Dist., Uda Walawe 300 ft. 1 Aug. 1973) is conspecific with the holotype. The others represent the following new species.

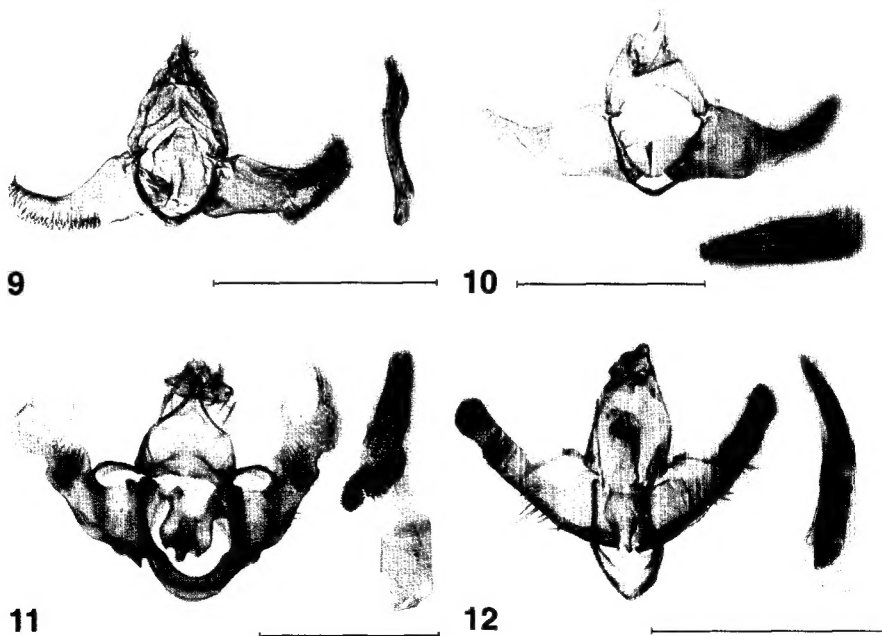
***Frisilia ceylonica* Park, sp. nov.**

(Figs 5, 12)

Diagnosis. This species is nearly indistinguishable from *Frisilia trizeugma* Wu et Park and *F. sejuncta* Meyrick. It can be distinguished by the labial palpus of the male: 3rd segment short, not exceeding the apex, greyish orange, speckled with dark brown scales on outer surface (whereas apical part much more exceeding the apex of the 2nd in *F. trizeugma*).

Male genitalia (Fig. 12). Similar to *F. trizeugma*, but aedeagus much smaller. Gnathos relatively short; costal bar connecting tegumen and valva with median process as in *F. trizeugma*. Distal part of valva with almost parallel margins, slightly broadened distally; ventral margin slightly concave, with mass of setae at about 3/4, more dense than in *F. trizeugma*. Juxta with long, slender median process, longer than that of *F. trizeugma*. Aedeagus more slender, slightly bent, with two slender, long bar-like cornuti (more heavily sclerotized, and S-shaped in *F. trizeugma*).

Description. Male: Wingspan 12.5–13.0 mm. Head pale brownish orange. Tegula dark brown along anterior margin, with long hair–pencils dorso–anteriorly. Antenna with relatively long scape, greyish orange, speckled with dark brown scales. Second segment of labial palpus greyish orange, speckled with



Figs 9-12. Male genitalia: 9, *Hyperochtha acanthovalva* sp. nov.; 10, *Antiochtha pycnotarsa* sp. nov.; 11, *Alciphanes clavata* sp. nov.; 12, *Frisilia ceylonica* sp. nov. (Scale: 1 mm).

dark brown scales on outer surface, black apically; third segment as long as 2nd, not exceed apex, mostly concolourous with 2nd. Forewing ground colour pale orange; dark brown scales scattered irregularly, more dense along costa at basal 1/5, termen, and near inner margin; dark brown discal spot near middle of cell, short dark brown streak below end of cell; two rows of characteristic setae-like scales along both sides of plical line below cell, upper one extended near 3/4 and lower one reaching termen; apex obtuse; termen oblique, not sinuate. Hindwing pale grey; apex acute; termen sinuate; fringe concolourous.

Type. Holotype: male, Anu. Dist., Wildlife Soc. Bungalo, Hunuwilagama, 200ft, Wilpattu, 10–19 Mar. 1970 (Davis & Rowe), gen. prep. no. USNM-82833. Paratypes: 1 ♂, Mon. Dist., Sella Kataragma, Menik Ganga, 150 ft, 24 Oct. 1970 (OS Flint), USNM-89617; 1 ♂, Ham. Dist., Palatupana, 10 ft, 22–25 Oct. 1970 (OS Flint), USNM-92170; 1 ♂, Ham. Dist., Hambantota, 28 Oct. 1970 (OS Flint). All types are in the National Museum of Natural History, USA.

Remarks. Seven female specimens of these related species (*trizeugma* Meyrick, *sejuncta* Meyrick, and *ceylonica* sp. nov.), were examined, but they could not be assigned to either of these species, because of their similarity in external appearance. Three different females are illustrated in Figs 18a–c.

Genus *Carodista* Meyrick, 1925

The wing venation of *Carodista* is similar to the that of *Lecithocera*, but can be distinguished by R_3 separated from R_{4+5} in the forewing. It is also characterized by the somewhat fine, long spines on the abdominal tergites; the heavily sclerotized, narrow rope-like band on anterior margin beyond the 5th sternite; and well developed lateral lobes of the juxta.

***Carodista grypotatos* Park, sp. nov.**

(Figs 7, 14)

Diagnosis. *Carodista grypotatos* sp. nov., *C. epigompha* (Meyrick), *C. exophalma* Meyrick, and *C. fornacalis* Meyrick, all have a similar wing pattern, but they can be separated by the male genitalic character, especially the length of median process of juxta and the shape of process on the ventral margin of the valva.

Male genitalia (Fig. 14). Dorsal surface of tegumen with deep, jar-shaped emargination distally. Gnathos relatively broad, with pointed apex. Valva elongate, broad at base, almost parallel beyond 2/5; outer margin slightly concave; apex obtuse; ventral margin with a strong thorn near 2/3 and short dense spines beyond thorn along margin, with a mass of long setae at inner area of thorn; sacculus broad, extend to near middle. Juxta with heavily sclerotized strong median process, more or less pointed; lateral lobes heavily sclerotized, digitate, with triangularly expanded process dorsoapically. Saccus well developed. Aedeagus as long as valva or longer, slightly bent beyond middle, with two crescent, dentate plates at lateral surface and sclerotized expansion in preapical area, with two long and two short rows of stout spines, and with sclerotized plate apically.

Description. Male. Wingspan 21.0–22.0 mm. Head with brownish appressed scales. Thorax dark brown. Antenna with scape dark brown dorsally; flagella greyish orange, speckled with brown scales above, not ciliate. Second segment of labial palpus thickened with rough appressed scales ventrally; dark

brown in basal half and pale greyish orange, sparsely speckled with dark brown scales in distal half on outer surface; pale grey orange on inner surface; third segment longer than 2nd, pale greyish orange at basal 2/3 and dark brown beyond it ventrally. Forewing relatively broad, irregularly clothed with brown or dark brown scales; costa almost straight, with dense dark brown scales in basal 1/5; costal patch yellowish orange, quadrate, near 3/4; large, elliptical, blackish antemedian patch bordered by yellowish orange scales along inner margin; median patch yellowish orange, X-shaped, with more black scales on upper and lower sides than before or beyond; postmedian line zigzag-shaped, usually inconspicuous; apex obtuse; termen slightly oblique; fringe brownish, with pale orange line basally. Venation with R_3 close to R_{4+5} at base; R_4 and R_5 stalked beyond middle; R_5 reaches beyond apex; M_1 more or less remote from R_{4+5} at base; M_2 remote from M_3 basally; CuA_1 and CuA_2 stalked near base. Hindwing grey, with broad orange white fascia to 3/4 along costa; apex obtuse; termen sinuate; M_2 very close to M_3 ; M_3 and CuA_1 stalked near base. Hindwing grey. Hindtibia with black scales laterally and orange grey above. Abdominal tergite with dense, somewhat thin, slender spines; spines easily removable.

Type. Holotype: Male, Gal. Dist., Kanneliya Jungle, 11–16 Jan 1975 (SL Wood & JL Petty), gen. prep. no. USNM-92163. Paratypes: 1 ♂, Kan. Dist., Jambugastenne, near Laksapana 1000 ft, 27 Sept. 1970 (OS Flint); 1 ♂, Rat. Dist., Giimale Lumber Mill 115 ft, 20–25 Oct. 1976 (GF Hevel, RD Dietz, S. Karunaratne, DW Balasooriya); 1 ♂, Rat. Dist., 2 mls Weddagala, Sinharaja Juungle, 8–12 Feb. 1977 (KV Krombein, P. Ferrando, DW Balasooriya, V. Gunawardane), USNM-88809. All types are in the National Museum of Natural History, USA.

Etymology. The specific name is derived from “gryp” (= hooked), referring to the thorn on ventral margin of the valva.

***Carodista tribrachia* Park, sp. nov.**

(Figs 8, 15)

Diagnosis. This species is nearly indistinguishable from *C. grypotatos* sp. nov., in external appearance, but it can be separated by the greyish orange head dorsally, dark brown antenna, and the male genitalia with a much shorter median process of the juxta.

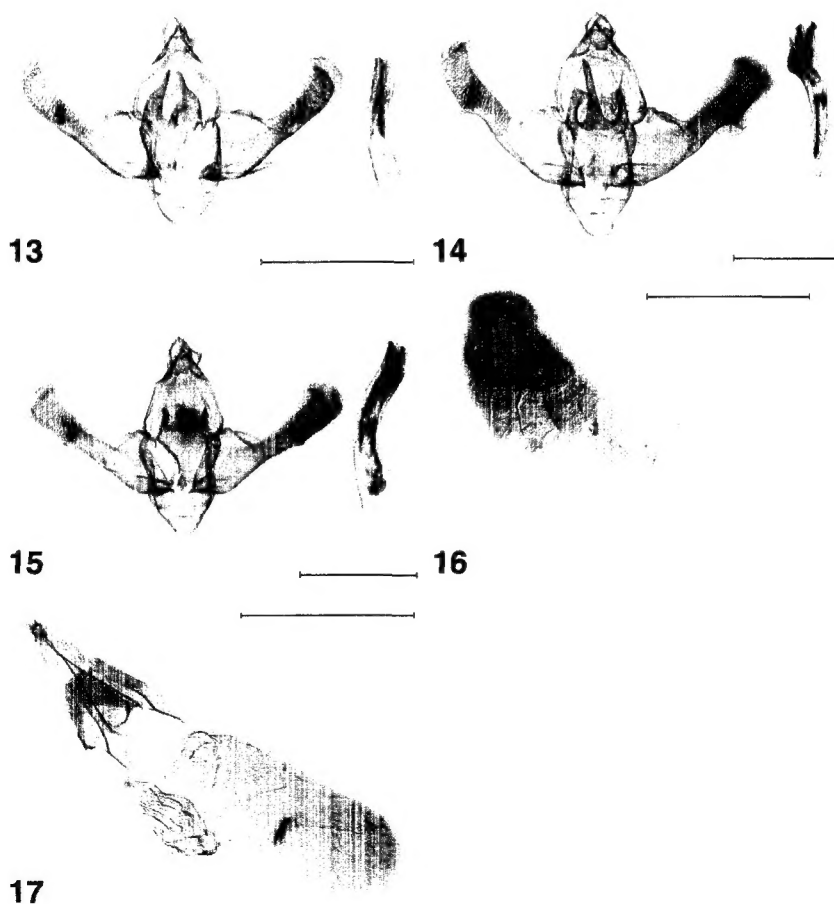
Male genitalia (Fig. 15). Generally similar to those of *C. grypotatos*, but can be easily distinguished by the longer, more pointed thorn on ventral margin of the valva; median process of juxta as long as lateral ones, lateral lobes somewhat digitate without expansion apically; aedeagus lacks of sclerotized expansion and crescent plates in apical area.

Description. Male. Wingspan 21.0–22.0 mm. Forewing pattern very similar to the preceding species, but the costal yellowish patch weakly presented, smaller, and postmedian line more distinct. Venation also same as the preceding species. Head clothed with brown scales with greyish orange tips. Thorax dark brown speckling with white scales sparsely, with more blackish scales at anterior apex. Antenna dark brown above throughout, greyish orange with well visible brown annulations below. Second segment of labial palpus stout, dark brown in basal half, greyish orange, speckled with dark brown scales in distal half on both surfaces; third segment shorter than 2nd, light orange in basal half, dark brown in distal half all around; apex white. Hindwing grey; M_2 remote from M_3 at base; apex obtuse; termen sinuate. Hindtibia

with black scales laterally, yellowish white scales near middle; yellowish orange scales near base, middle, and apex on upper surface. Abdominal tergites with spines similar to the preceeding species.

Type. Holotype: Male, Gal. Dist., Kanneliya 200 ft, 15-17 Oct. 1975 (GF Hevel, RD Dietz, S. Karunaratne, DW Balasooriya), gen. prep. no. USNM-92165. Paratypes: 1 ♂, same data as the holotype; 1 ♂, Rat. Dist., Giimale Lumber Mill 115 ft, 20-25 Oct. 1976 (GF Hevel, RD Dietz, S. Karunaratne, DW Balasooriya), USNM-92164.; 1 ♀, Bad. Dist., Ella, 25 Sept. 1976 (GF Hevel, RD Dietz, S. Karunaratne, DW Balasooriya), USNM-89154.

Etymology. The specific name is derived from "tri" (= three), "brachi" (= arm), corresponding to the three lobes of the juxta in the male genitalia.



Figs 13-17. Male genitalia: 13, *Carodista wilpattuue* sp. nov.; 14, *C. grypotatos* sp. nov.; 15, *C. tribrachia* sp. nov.. Female genitalia: 16, *Hyperochtha acanthovalva* sp. nov.; 17, *Alciphanes clavata* sp. nov. (Scale: 1 mm).

***Carodista wilpattuae* Park, sp. nov.**

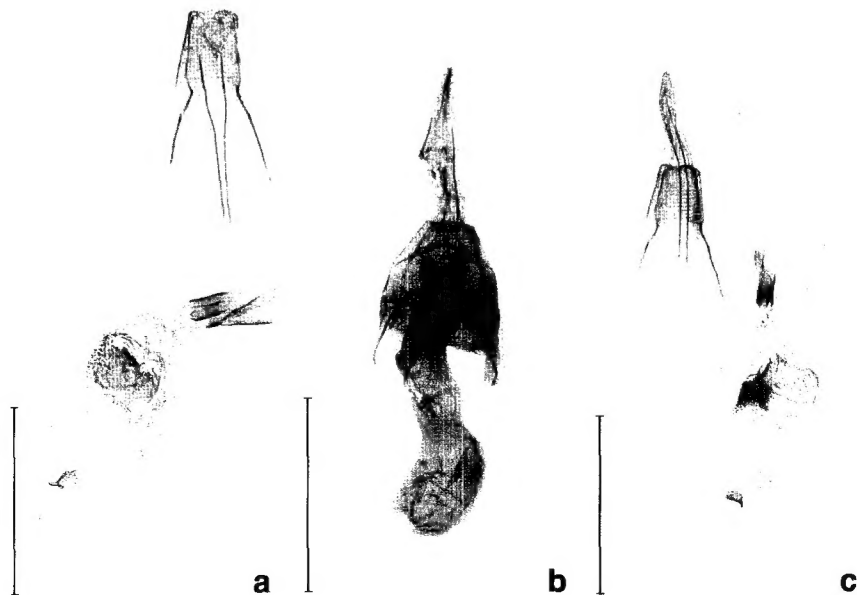
(Figs 6, 13)

Diagnosis. This species is similar to *Lecithocera metopaena* Wu et Park in external appearance and wing venation, but it can be separated by the male genitalia.

Male genitalia (Figs 13). Valva elongate, similar to that of *C. tribrachia*, but without ventral process; distal end less dialted. Juxta with more elongate, slender; lateral lobes, broadened in basal half, attenuate to apex; median process digitate, about half length of lateral ones. Aedeagus also similar to that of *C. tribrachia*, but much more slender, with two rows of teeth, and with expansion serrated edges laterally in preapical part.

Description. Male. Wingspan 13.5 mm. Head with greyish brown scales dorsally. Tegula and thorax dark brown. Antenna dark brown throughout, with more or less loose scales in apical 1/5. Second segment of labial palpus thickened with appressed scales ventrally, dark brown with greyish orange scales ventroapically; third segment as long as 2nd, greyish orange; dark brown preapically. Forewing relatively short, generally similar to the preceeding species, with somewhat large, yellowish-orange patch near 3/4; discal spot at middle; large yellowish-orange patch at end of cell, speckled with golden yellow scales; short blackish streak below discal spot; R_3 close to R_{4+5} at base, R_4 and R_5 stalked near middle; M_1 more or less remote from R_3 ; M_2 remote from M_3 ; CuA_1 and CuA_2 stalked near base. Hindwing grey; M_2 remote from M_3 at base; M_3 and CuA_1 shortly stalked. Abdominal tergites with removable fine spines; sclerites on anterior margins of abdomen weak in all segments.

Type. Holotype: male, Anu. Dist., Wildlife Soc. Bungalo, Hunuwilagama 200 ft, Wilpattu, 10-19 Mar.



Figs 18a-c. Female genitals of *Frisilia* spp. (Scale: 1 mm).

1970 (Davis & Rowe), gen. prep. no. USNM-92166. Holotype is in the National Museum of Natural History, USA.

Etymology. The specific name refers to the collecting locality of the holotype.

New additional faunistic data

1. *Holaxyra isoclera* Meyrick, 1913

– 1 ♂, Maskeliya, Ceylon, Pole, 6. 04, comp. with type, *H. isoclera* Meyrick, det. JFGC (1948), Meyrick Coll.

2. *Lecithocera bracculata* Meyrick, 1911

– 1?, Maskeliya, Pole. 4. 06, comp. with type, *L. bracculata* Meyrick, det. JFGC (1948), in Meyrick coll.

3. *Nosphistica erratica* Meyrick, 1911, *Thubana xanthoteles* Meyrick, 1923 (= *melitopyga* Meyrick, 1923), and *Timyra stachophora* Meyrick, 1908, were also described from Sri Lanka, and all these types are in the Natural History Museum in London.

DISCUSSIONS

1. *Epharmonia* Meyrick, 1925 related genera, which M_2 absent in the hindwing, include *Eccedoxa* Gozmany, 1973; *Philharmonia* Gozmany, 1978; and *Hyperochtha* Meyrick. *Hyperochtha* is closely similar to *Epharmonia*, but in the forewing of the latter R_5 extends to the termen and CuA_1 & CuA_2 are not stalked. In Meyrick's (1925) description of *Epharmonia* (based on the type species, *E. aruda* Meyrick), he noted that CuA_1 and CuA_2 are stalked, M_3 is separated from M_2 . However, according to Clarke's illustration (1965: pl. 27, fig 1a), CuA_1 is absent (the CuA_1 was probably missed in the figure of the type), and M_2 and M_3 are connate. In Meyrick's description of *Hyperochtha* (based on the type species, *H. butyropa* Meyrick), M_3 is connate with CuA_1 and CuA_2 , or M_2 or absent. However, in the type species, M_2 is absent and M_3 is free from $CuA_1 + CuA_2$. It is concluded that venation is often variable in the genera of this group, however, a distinct character separating *Epharmonia* Meyrick from *Hyperochtha* Meyrick is the presence of M_2 in the forewing. In this context, the generic status of these related genera should be re-evaluated from a phylogenetic perspective.

Key to the *Epharmonia*-related genera, based on the forewing venation

- | | |
|---|---------------------|
| 1. M_2 present | <i>Epharmonia</i> |
| – M_2 and M_3 coincident | 2 |
| 2. R_5 present | 3 |
| – R_5 absent | <i>Eccedoxa</i> |
| 3. M_{2+3} arising from middle of cell | <i>Hyperochtha</i> |
| – M_{2+3} arising from lower angle of cell, almost straight from vein Cu stem | <i>Philharmonia</i> |

2. Genus *Alciphanes* is one of the *Timyra*-related genera, including *Doxogenes* Meyrick, *Mnesteria*

Meyrick, *Technographa* Meyrick, and *Teucrodoxa* Meyrick. All these genera seems to be in a same lineage, with a similar antenna and labial palpus, and sometimes nearly indistinguishable structure of the genitalia. *Timyra* Walker has a normal shape of the forewing, with oblique termen, but others have elongate, more or less lanceolate forewings. *Technographa* Meyrick is superficially similar to *Doxogenes*, but venation is more close to that of *Alciphanes*; and it has CuA₁ in the hindwing, separating from *Timyra* Walker in which it is absent (type species). However this condition in *Timyra* is considerably variable: *praeceptrix* Meyrick, *aulonitis* Meyrick, *machlas* Meyrick, and few others of *Timyra* also have CuA₁ in the hindwing, while absent in the type species, *phycidella* Meyrick and *pastas* Meyrick. In this context, I synonymized *Technographa* Meyrick (syn. nov.) with *Timyra* Walker. However, the generic status of these other genera should be discussed and re-evaluated with a further phylogenetic study. Recently described species, *Timyra antichira* Wu and Park (1999), should be transferred to *Alciphanes*, because of its wing shape and its venation: *Alciphanes antichira* (Wu and Park, 1999), comb. nov.

Key to the *Timyra*-group, based on the venation of both wings

1. M₂ present in hindwing; hindtibia without whorl, hair-like scales 2
 – M₂ absent in hindwing; hindtibia with whorl, hair-like scales 3
2. Forewing with R₅ absent; CuA₁ present in forewing *Mnesteria*
 – Forewing with R₄ and R₅ stalked; R₅ to termen; CuA₁ absent *Doxogenes*
3. Forewing normal shape, with oblique termen; R₅ extends to apex or termen; M₂ and M₃ free or stalked *Timyra*
 – Forewing elongate, more or lanceolate; R₅ to costa; M₂ and M₃ usually stalked 4
4. M₃ and CuA₁ stalked in forewing *Teucrodoxa*
 – M₂ and M₃ stalked in forewing *Alciphanes*

3. *Carodista* Meyrick: The wing venation of this genus is similar to the that of *Lecithocera*, but the former can be distinguished by having somewhat fine, long spines on the abdominal tergites; the heavily sclerotized, narrow rope-like band on anterior margin beyond the 5th sternite (This is a consistent character of this genus); without the characteristic sclerite on 7th segment as well as *Lecithocera*; and well developed lateral lobes of the juxta. Park (2000) stated that the valva of the male genitalia in *Carodista* lack the outward directed tooth in the middle of ventral margin, but this is incorrect. Based on this context, following species which previously placed in the *Lecithocera* are transferred to *Carodista*: *C. callirrhabda* (Meyrick), **comb. nov.**; *C. capnaula* (Meyrick), **comb. nov.**; *C. cordata* (Meyrick), **comb. nov.**; *C. epomia* (Meyrick), **comb. nov.**; *C. exophthalma* (Meyrick), **comb. nov.**; *C. fornacalis* (Meyrick), **comb. nov.**; *C. haemylopis* (Meyrick), **comb. nov.**; *C. nefasta* (Meyrick), **comb. nov.**; *C. paroena* (Meyrick), **comb. nov.**; *C. metopaena* (Wu and Park), **comb. nov.**

4. Genus *Stelechoris* Meyrick. **stat. rev.**: This genus has been treated as a junior synonym of *Thubana*, due to the similar venation, but the male genitalia of the type species of *Stelechoris* has a

distinguishable characteristic from *Thubana*, with valva broadened basally and narrowed towards distally. Thus, following two species of *Thubana* are transferred to *Stelechoris*: *S. laxata* (Meyrick), **comb. nov.**; *S. nodosa* (Meyrick), **comb. nov.**

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